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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,555	04/14/2004	Yukihiro Niekawa	04221 /LH	8847
1933	7590	02/24/2006	EXAMINER	
FRISHAUF, HOLTZ, GOODMAN & CHICK, PC			MARTIN, LAURA E	
220 Fifth Avenue			ART UNIT	
16TH Floor			PAPER NUMBER	
NEW YORK, NY 10001-7708			2853	

DATE MAILED: 02/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

H.A

<b>Office Action Summary</b>	<b>Application No.</b> 10/825,555	<b>Applicant(s)</b> NIEKAWA ET AL.	
	<b>Examiner</b> Laura E. Martin	<b>Art Unit</b> 2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 6, 7, 15, 16, 20, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Fujita et al. (US 2002/0024558).

Fujita et al. teaches an inkjet recording device comprising: a recording head with a nozzle for jetting ink ([0158]-[0161], figures 3-5) wherein the inkjet recording device records an image by jetting the ink from the recording head onto the recording medium while moving the recording head and the recording medium relatively ([0156] and figure 7), and the inkjet recording device further comprises a viewing distance setting unit for setting a parameter corresponding to a distance from which the recording medium after a recording is viewed [0080]; an image quality level setting unit for setting an intended image quality level of the image to be recorded ([0080], [0241]-[0243], figures 13a-13c); a size identifying unit for identifying a recording size of the image to be recorded [0222], and a recording mode setting unit for setting a recording mode based on the parameter set by the viewing distance setting unit ([0080], [0241]-[0243], figures 13a-13c); and a control device for controlling an operation of a jetting of the ink by the recording head and the relative movement of the recording head and the recording medium so that the recording is performed according to the recording mode set by the recording mode

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setting unit [0241]. Fujita et al. also teaches a head scanning mechanism for making the recording head scan in a direction perpendicular to a conveying direction of the recording medium [0045], wherein the recording mode setting unit is the number of scans of the recording head which is required to record a predetermined area in the conveying direction of the recording medium [0080]. Fujita et al. also teaches the recording mode set by the recording mode setting unit is a recording resolution [0080]; and an image quality level setting unit for setting an intended image quality level to be recorded wherein the recording mode setting unit sets the recording mode based on the parameter set by the viewing distance setting unit and the image quality level set by the image quality setting unit [0080].

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-5, 8, and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita et al. (US 2002/0024558) in view of Noyes et al. (US 6364542).

Fujita et al. teaches a head scanning mechanism for making the recording head scan in a direction perpendicular to a conveying direction of the recording medium [0045]; the nozzle is formed extending along a recording width of the recording medium

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(figure 11) the inkjet recording device further comprising a conveying mechanism for conveying the recording medium in a direction perpendicular to the recording width (figure 1, element M3022); and a mode based on the parameter set by the viewing distance setting unit [0080].

Fujita et al. does not teach the recording mode set by the recording mode setting unit is one of a two-way recording for performing the recording by jetting the ink from the recording head in both directions of a back-and-forth scan of the recording head by the head scanning mechanism, or a one-way recording for performing the recording by jetting the ink from the recording head in one direction of a back-and-forth scan of the recording head by the head scanning mechanism; the recording mode set by the recording mode setting unit is a scan speed of the recording head by the head scanning mechanism; the recording mode set by the recording mode setting mechanism is a conveying speed of the recording medium by the conveying mechanism; and wherein the recording mode setting unit sets the recording mode based on the type of the recording medium specified by the recording medium specifying unit.

Noyes et al. teaches the recording mode set by the recording mode setting unit is one of a two-way recording for performing the recording by jetting the ink from the recording head in both directions of a back-and-forth scan of the recording head by the head scanning mechanism, or a one-way recording for performing the recording by jetting the ink from the recording head in one direction of a back-and-forth scan of the recording head by the head scanning mechanism (column 49, lines 7-17; figure 36, element S3619); the recording mode set by the recording mode setting unit is a scan

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speed of the recording head by the head scanning mechanism (column 54, lines 16-23); the recording mode set by the recording mode setting mechanism is a conveying speed of the recording medium by the conveying mechanism (column 54, lines 17-24); and wherein the recording mode setting unit sets the recording mode based on the type of the recording medium specified by the recording medium specifying unit (column 44, lines 49-58).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the inkjet recording device of Fujita et al. with the disclosure of Noyes et al. in order to provide a higher quality printer.

Claims 9-11, 22, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita et al. (US 2002/0024558) in view of Mantell (US 6189993).

Fujita et al. teaches an interface for connecting with an external device (figure 7, element E0013; [0184]) as well as an image quality setting unit [0080]; however, it does not disclose an input for setting in the viewing stance setting unit is performed in a computer system connected to the interface directly or through a predetermined network; an input for setting in the setting unit is performed in a computer system connected to the interface directly or through a predetermined network; and wherein an input for the setting in the recording medium specifying unit is performed in a computer system connected to the interface directly or through a predetermined network.

Mantell teaches an input for setting in the viewing stance setting unit is performed in a computer system connected to the interface directly or through a

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predetermined network (column 6, lines 9-20); an input for setting in the setting unit is performed in a computer system connected to the interface directly or through a predetermined network (column 11, lines 20-32); and wherein an input for the setting in the recording medium specifying unit is performed in a computer system connected to the interface directly or through a predetermined network (column 11, lines 20-32).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the inkjet recording device of Fujita et al. with the disclosure of Mantell in order to create a higher quality printer.

Claims 12-14 and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita et al. (US 2002/0024558) in view of Noguchi (US 2002/0064603).

Fujita et al. teaches the inkjet recording apparatus of claims 1 and 15; however, it does not disclose the ink being photocurable ink cured by irradiation of a light, and the inkjet recording device further comprising a light source for irradiating the light onto the photocurable ink jetted from the recording head and landed on the recording medium; wherein the photocurable ink is UV curable ink cured by irradiation of a ultraviolet ray and the light source is a UV light source for generating the ultraviolet ray; and wherein the UV curable ink is ink comprising a cationic polymerizable compound.

Noguchi teaches an ink being photocurable ink cured by irradiation of a light [0002], and the inkjet recording device further comprising a light source for irradiating the light onto the photocurable ink jetted from the recording head and landed on the

recording medium [0169]; wherein the photocurable ink is UV curable ink cured by irradiation of a ultraviolet ray and the light source is a UV light source for generating the ultraviolet ray [0169]; and wherein the UV curable ink is ink comprising a cationic polymerizable compound [0026].

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the inkjet recording apparatus of Fujita et al. with the disclosure of Noguchi in order to create a more durable printed image.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura E. Martin whose telephone number is (571) 272-2160. The examiner can normally be reached on Monday - Friday, 7:00 - 3:30.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Laura E. Martin

 2/21/06  
MANISH S. SHAH  
PRIMARY EXAMINER